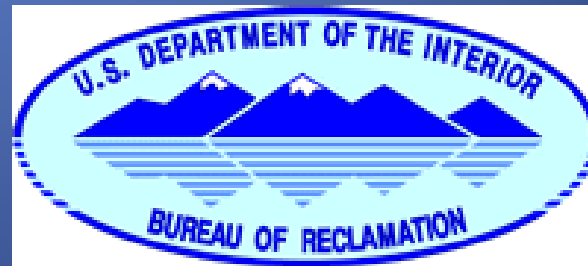


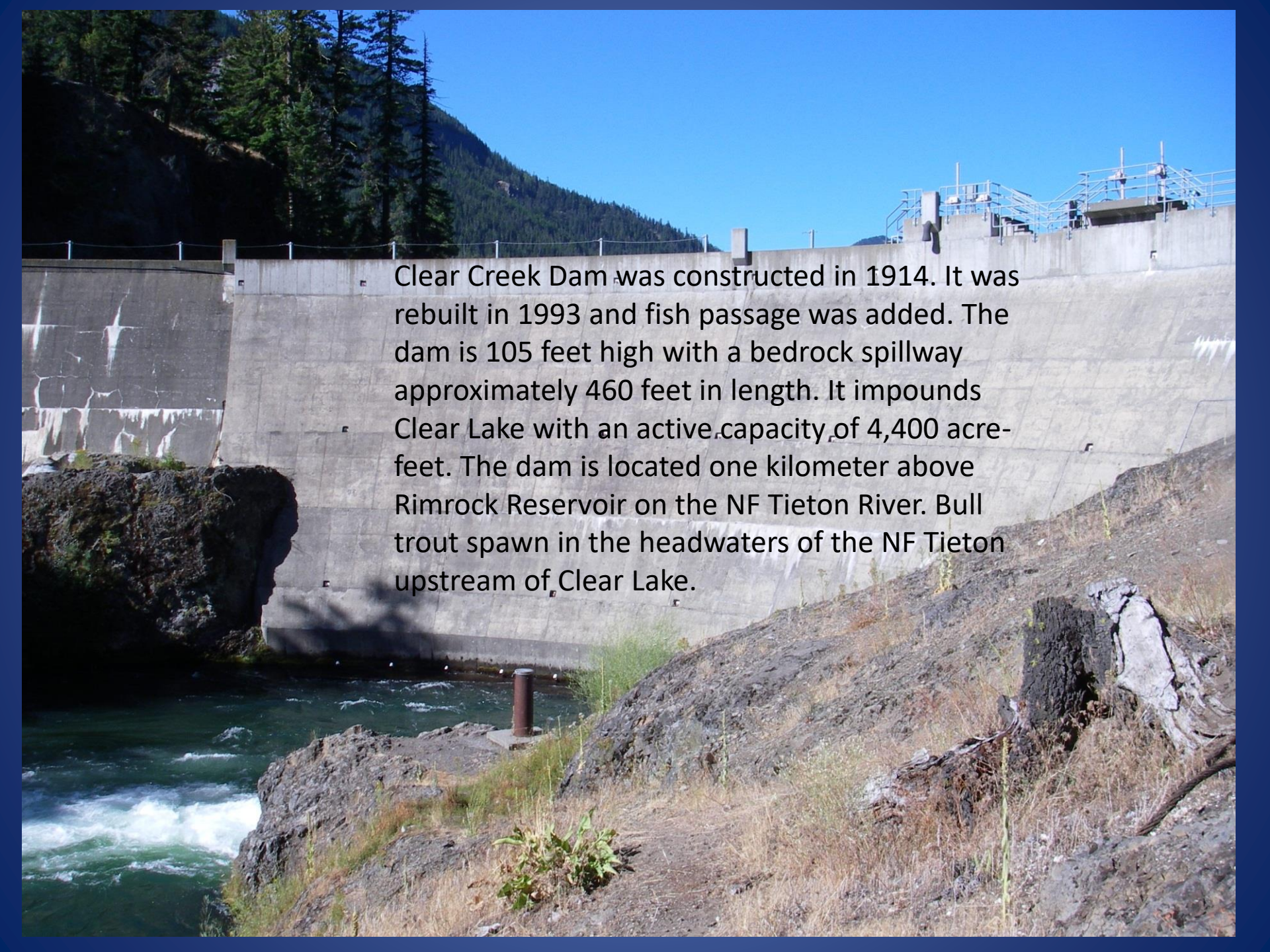
NF Tieton Bull Trout Transport Project

2016 and 2017

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U.S. Fish and Wildlife Service/ YRBWEP



A large concrete dam with a spillway, situated in a mountainous area with evergreen trees. The dam is surrounded by rocky terrain and a river with white water rapids. The sky is clear and blue.

Clear Creek Dam was constructed in 1914. It was rebuilt in 1993 and fish passage was added. The dam is 105 feet high with a bedrock spillway approximately 460 feet in length. It impounds Clear Lake with an active capacity of 4,400 acre-feet. The dam is located one kilometer above Rimrock Reservoir on the NF Tieton River. Bull trout spawn in the headwaters of the NF Tieton upstream of Clear Lake.

World



NF-740

NF-744

NF-745

NF-745

NF-740

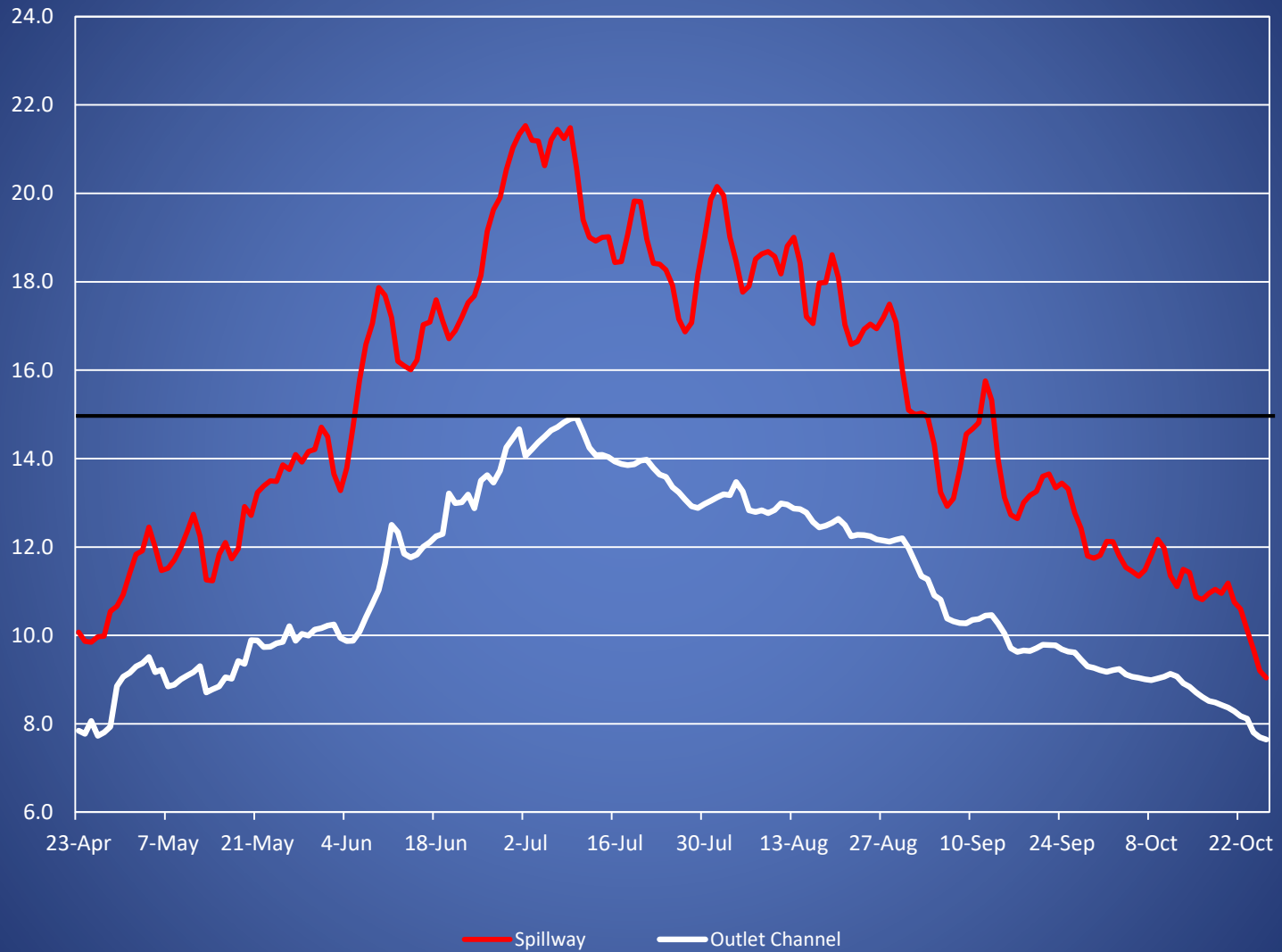
100 feet 25 m

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2015 mean daily water temperatures (°C)



Clear Creek Dam Fish Passage Assessment 2012-2015

The North Fork Tieton Bull Trout population exists in two segments which are roughly equivalent in size. One segment spawns in the river above Clear Lake and predominantly uses the lake for foraging and overwintering habitat. The other segment resides in Rimrock Reservoir and congregates below Clear Creek Dam in the summer, unable to migrate up the spillway channel. Both high water temperatures and extreme hydraulic conditions preclude fish passage up the spillway channel.

Capture and Transport Study Objectives

- Capture adult bull trout in the stilling basin directly below Clear Creek Dam
- Tag the fish with HDX PIT tags and collect genetic samples
- Transport tagged bull trout above the dam
- Monitor movements of the fish in the NF Tieton watershed
- Assess the spawning success of transported fish



2016









RESEARCH

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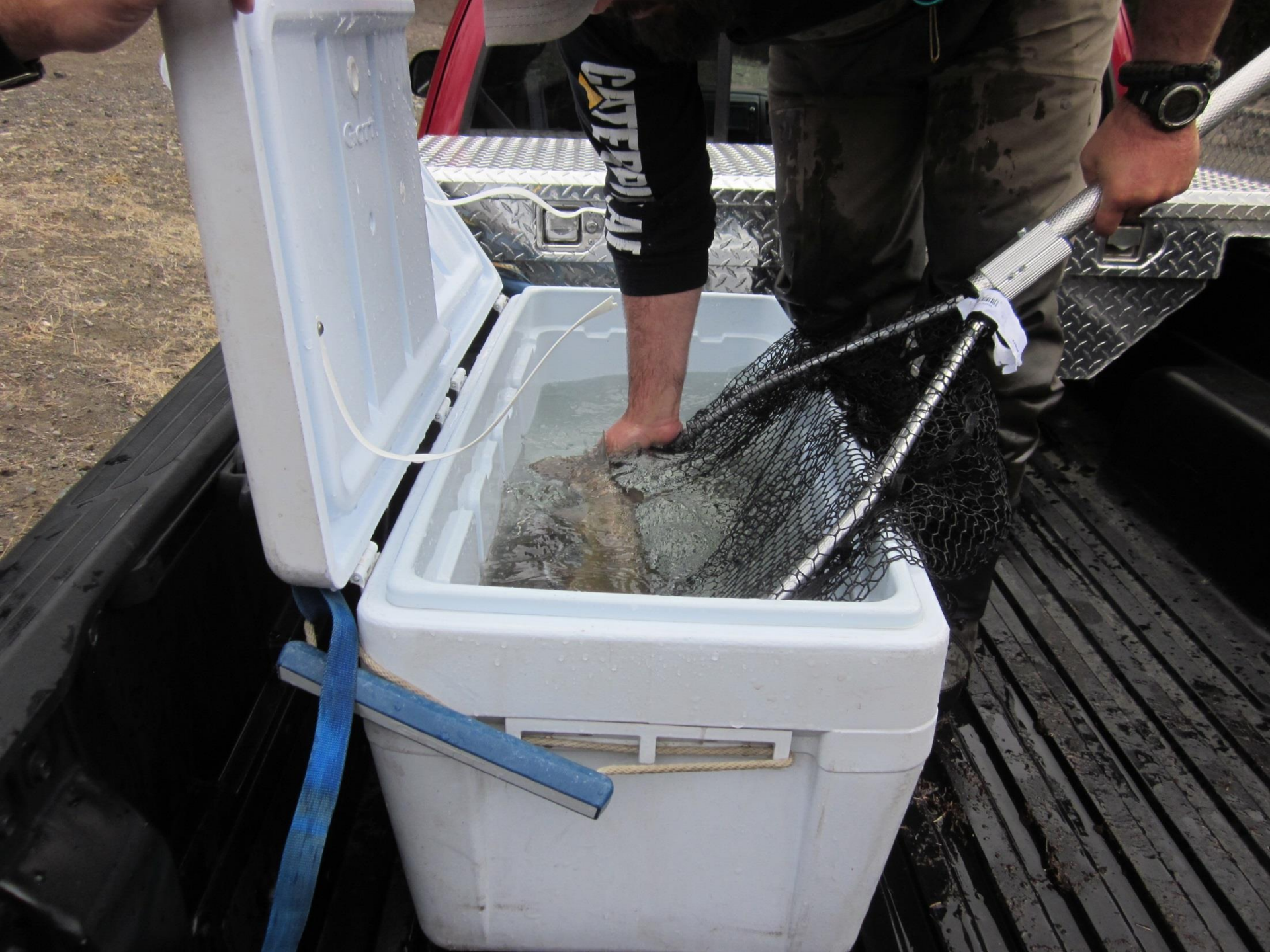




32.2 cm



75.5 cm

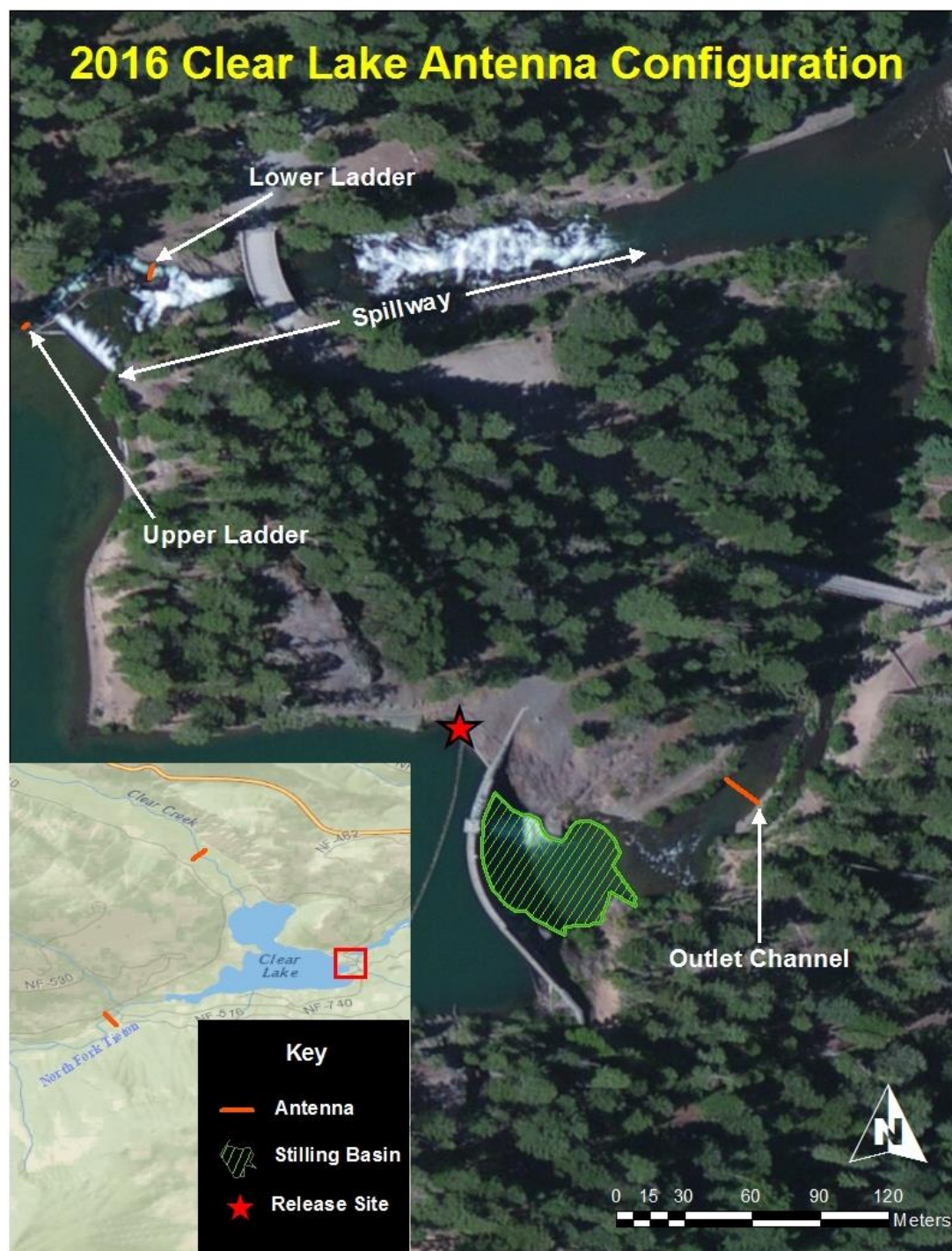








2016 Clear Lake Antenna Configuration



Results 2016

Thirty fish were captured and transported during five sampling dates between July 7 and August 3.

Seventeen of these fish genetically keyed to the NF Tieton population; of the remaining 13 fish, seven belonged to the Indian Creek population, five to the SF Tieton, and one was a hybrid

14 of the NFT bull trout were subsequently detected up the NF Tieton River

Results 2017

Thirty-six fish were captured during five sampling dates between June 26 and July 31


Nineteen of these fish genetically keyed pure to the NF Tieton population; **These were the only fish transported**. Nine belonged to the Indian Creek population, 6 SF Tieton, and two hybrids; all but the hybrids were released downstream

Twelve of the transports were subsequently detected up the NF Tieton River along with seven from the previous year

Bottom Line

Thirty-six NF Tieton bull trout were transported above Clear Creek Dam in 2016 and 2017. The average TL of these fish was 52.3 cm. Eighteen of these fish appeared to be females and eight males (we could not visually determine the sex of the other 10)

The number of bull trout redds counted in the NF Tieton River above Clear Lake last September was 39. This is the highest count recorded in the 10 years since surveys began and nearly double the ten-year average of 20 redds

A close-up photograph of a person in a white shirt holding a large, dark-colored fish. The fish's mouth is wide open, revealing a smaller, lighter-colored fish inside. The person's hands are visible, holding the fish. The background shows a rocky stream with water splashing. A thought bubble is overlaid on the right side of the image, containing the text "Whoopee! Looks like help is on the way".

Whoopee! Looks like help is on the way